IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of) Attorney Docket No.: YOSHID0019
Shinji FURUSHO) Confirmation No. 4362
Serial No.: 10/532,492) Group Art Unit: 2169
Filed: February 3, 2006) Examiner: Marc S. Somers
For: DATA PROCESSING METHOD AND DATA PROCESSING PROGRAM)))

SECOND DECLARATION UNDER 37 C.F.R. § 1.132

MAIL STOP: AMENDMENT

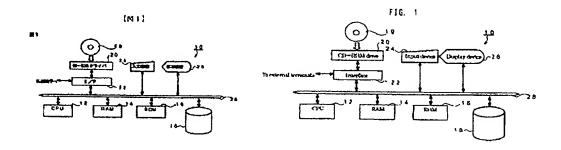
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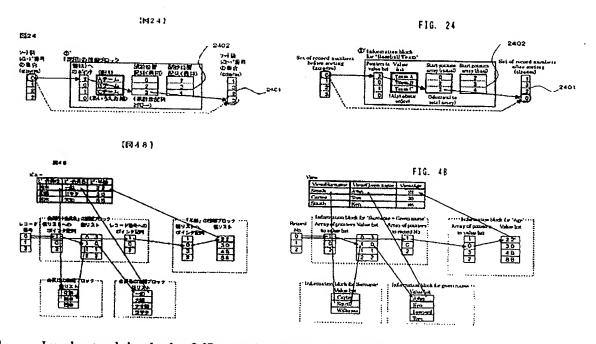
Sir:

- 1. I, Shinji FURUSHO, the inventor in the above-captioned application, state that I am an expert in the field of data processing research and development, and that I am also the inventor of the subject matter of Japanese Patent Application Laid-open No. JP 2000-339390 A (hereafter, the "Shinji Document," of record), which was filed in Japan on May 31, 1999 as Japanese Patent Application No. 11-151156. These facts are evident from the face of the Shinji Document. By this declaration, I supplement my Declaration under 37 C.F.R. § 1.132 dated June 9, 2009, and correct a minor typographical error pertaining to U.S. Patent 6,721,751 B1 in the June 9th Declaration.
- 2. The fact that I am the inventor of the subject matter of the Shinji Document is corroborated by the following facts. First, U.S. Patent 6,721,751 B1, issued to me on April 13,

2004, which was the U.S. National stage application of International Application No. PCT/JP00/03465, filed May 30, 2000, and which claimed priority to Japanese Patent Application No. 11-151156. The fact that U.S. Patent 6,721,751 B1 claims priority to Japanese Patent Application No. 11-151156, which published as the Shinji Document, is evidence that I am the inventor of the subject matter of the Shinji Document. In addition, the Delphion Integrated View corresponding to U.S. Patent 6,721,751, downloaded on December 12, 2008, and previously filed as "Exhibit A" in the above-captioned matter on December 16, 2008, lists me as the inventor of U.S. Patent 6,721,751 and lists the Shinji Document (JP 2000-339390 A2) as a member of the same patent family. This additional information further demonstrates that I am the inventor of the subject matter of the Shinji Document.

3. The fact that U.S. Patent 6,721,751 and the Shinji Document disclose the same subject matter, of which I am the inventor, is plainly evident from a comparison of the documents. For example, the same specific relationship pertaining to point values disclosed in col. 6, lines 33-57, of U.S. Patent 6,721,751 is disclosed in ¶ [0017] of the Shinji Document. Furthermore, both documents include the same forty-nine (49) figures with subparts, although the figures in the Shinji Document have Japanese characters and the figures of U.S. Patent 6,721,751 employs English characters. A side by side comparison of just some of the figures, namely, Figures 1, 24 and 48 provided below makes it clear that the same drawings are used in both documents.





- 4. I understand that in the Office Action of March 5, 2009, at 9, line 7, to 10, line 10, the Examiner contends the Shinji Document and U.S. Patent 6,721,751 have different inventive entities because the inventor of the Shinji Document is listed as "Kosho Shinji" in the Patent Abstracts of Japan (See, e.g., Item (72) in the Corresponding Patent Abstract of Japan, of record as "Exhibit B."), while my name is listed as "Shinji Furusho" on the face of U.S. Patent 6,721,751. The fact is that my name is listed correctly, in Japanese, on the face of the Shinji Document as " 古庄 晋二 ". The fact is that the English translation of my name in the Patent Abstracts of Japan is incorrect. This mistranslation is because the Chinese characters 古庄 corresponding to "Furusho" may be read as "Kosho" because the first character may be read as either "Furu" or "Ko." I personally am not concerned about the English mistranslation of my name in the Patent Abstract of Japan.
- 5. In view of the above facts, I believe I have established that I am correctly listed as the inventor of both the Shinji Document and U.S. Patent 6,721,751, which disclose the same

invention and which are members of the same patent family.

Testimony Regarding the Shinji Document

- 6. As inventor of the subject matter of both the Shinji Document and the invention of the above-captioned patent application, I will point out certain distinguishing features of the invention from the subject matter disclosed by the Shinji Document. In doing so, I will reference U.S. Patent 6,721,751 (hereafter, the "Furusho Patent") for the Examiner's convenience. As established above, the Furusho Patent discloses the same invention as the Shinji Document. In addition, a copy of the claims of the above-captioned application, as modified by Amendment (D) filed herewith, are attached to my testimony as an Appendix.
- 7. The Shinji Document discloses a structure for table-format data with a small data size whereby a plurality of tables of table-format data can be joined as desired, a method of concatenating table-format data, and a method for displaying concatenated table-format data (See Abstract of the Furusho Patent and see Abstract of the Shinji Document). In accordance with the method disclosed by the Shinji Document, each table of table-format data is constructed in a manner such that each table is divided into one or more information blocks consisting of: (i) a value list in which the field values are stored in the order of a field value number corresponding to the field value belonging to a specified field, and (ii) a pointer array in which pointer values for pointing to said field value numbers are stored in a unique record order (See Abstract of the Furusho Patent and see Abstract of the Shinji Document).
- 8. In other words, the Shinji Document (and the Furusho Patent) discloses a method of concatenating a plurality of tables of table-format data where each table is represented by an array of records containing a field and the field values contained therein, wherein the method

comprises the steps of: (a) constructing each table of table-format data in a manner such that each table is divided into one or more information blocks consisting of (i) a value list in which the field values are stored in the order of a field value number corresponding to the field value belonging to a specified field, and (ii) a pointer array in which pointer values for pointing to said field value numbers are stored in a unique record order; (b) finding equivalent fields among a plurality of tables of table-format data, identifying the information blocks for the equivalent fields in each of the plurality of tables of the table-format data; and (c) comparing the value lists contained in the identified information blocks, and setting both value lists to the same values, at the time of setting the value lists to the same values, adding pointer values to associated pointer arrays in the information block to which that field value is added, and by making the value lists contained in the information blocks for specific fields in the plurality of tables of table-format data equivalent, concatenating the table-format data (See, e.g., claim 1 of the Furusho Patent and see claim 1 of the Shinji Document).

9. However, neither the Shinji Document nor the Furusho Patent teach, or even suggest, (i) "creating an ordered set array containing record numbers of records selected from the array of records, wherein the selected record numbers are arranged in a specified order in the ordered set array" and (ii) "arranging a pointer value in the first pointer array at a position indicated by each of the record numbers of the ordered set array into an item value number array at a position corresponding to a position where the record number is arranged in the ordered set array" as recited by independent claims 1, 3, 9, 11 and 29-34. The Shinji Document and the Furusho Patent also do not teach, or even suggest, (iii)

"creating a second value list storing value elements contained in the item value number array and a second pointer array storing position elements indicating elements in the second value list corresponding to the record numbers by referring to the item value number array, wherein a value in the first value list is specified from a record number of the

ordered set array through a first element in the second pointer array at a position indicated by the record number and a second element in the second value list at a position indicated by the first element in the second pointer array"

as recited by claims 1, 9, 29-31 and 33, and (iv)

"specifying a value in the first value list from a record number of the ordered set array through an element in the item value number array at a position indicated by the record number"

as recited by claims 3, 11, 32 and 34.

- In other words, neither the Shinji Document nor the Furusho Patent teach, or suggest, steps (b), (c) and (d) recited by independent claims 1, 9 and 29-31 and 33, and steps (b), (c) and (d) recited by independent claims 3, 11, 32 and 34 of the above-captioned application. According to the embodiments of the present invention recited by claims 1, 3, 9 and 11, a data processing method is provided that can efficiently handle a small subset from a very large tabular format data. With respect to the embodiments of the present invention recited by claims 1 and 9, the size of the value list is shrunk because the second value list, whose size is smaller than that of the first value list, is generated. Consequently, it is possible to shorten the processing time for retrieval, aggregation, sorting and joining.
- 11. In sum, as the inventor of the subject matter of the Shinji Document, the Furusho Patent and the presently claimed invention, and as an expert in the art, I can tell you that the Shinji Document and the Furusho Patent each do not disclose the same invention as claimed by the above-captioned application and, therefore, cannot either anticipate the invention claimed by the above-captioned application, or render it obvious. To the extent the Examiner contends that I have no factual basis for my opinion (Office Action, mailed September 15, 2009, at 12, line 12, to 13, line 2), I believe the Examiner's contention is absurd in view of the fact that I am the inventor of the subject matter of the Shinji Document, the Furusho Patent, and the above-

captioned application. I believe that I am the person most qualified to render an opinion regarding the scope of my own inventions, and, having reviewed the Office Action of September 15, 2009, I see no facts adduced by the Examiner to rebut my assertion that the subject matter disclosed by the Shinji Document and/or the Furusho Patent does not include limitations (i) to (iv) listed in ¶ 9 above.

- 12. I note that in the Office Action of September 15, 2009, the Examiner refers to Japanese Patent Application Laid-open No. JP 2000-339390 A as the "Kosho Document" (See, e.g., Office Action, mailed September 15, 2009, at 4, lines 11-14). I have been referring to the same document as the "Shinji Document." In this declaration, I will refer to Japanese Patent Application Laid-open No. JP 2000-339390 A interchangeably as the "Kosho Document" or the "Shinji Document."
- 13. The Examiner contends that the Kosho Document and the Furusho Patent disclose

"a data processing method for extracting a subset as a processing object from a tabular format data expressed as an array of records each including an item and an item value belonging to the item"

(Office Action, dated September 15, 2009, at 4, lines 18-21).

as allegedly supported by Abstracts of the Kosho Patent and the Furusho Patent. (Office Action, dated September 15, 2009, at 4, lines 18-21). However, each of the Kosho Document and the Furusho Patent are directed to a method of concatenating table-format data, and method of presenting concatenated table-format data, which pertains to joining a plurality of tables of table format data and not to methods for extracting a subset as a processing object (See Abstracts of the Kosho Document and Furusho Document). In my opinion, neither the Kosho Document nor the Furusho Patent teach, or suggest, a method for extracting a subset as a processing object as the Examiner suggests.

- 14. The Examiner erroneously contends that the Kosho Document and/or the Furusho Patent teaches, or suggests, "creating an ordered set array containing record numbers of records selected the array of the records" (Office Action, dated September 15, 2009, at 5, lines 4-6). The Examiner's contention is flawed because neither the Kosho Document nor the Furusho Patent discloses, or suggests, an "array containing record numbers of records selected from the array of the records" as recited by independent claims 1, 3, 9, 11 and 29-34. While the Kosho Document, ¶¶ [0005] and [0012], may disclose expressing combined table format data as an "array of records," the Kosho Document does not teach, or suggest, an ordered set array containing record numbers of records selected from the array of records." Therefore, neither the Kosho Document nor the Furusho Patent teaches, or suggests creating such an ordered set array as recited by independent claims 1, 3, 9, 11 and 29-34. According to the present invention, the subset to be processed is extracted from the tabular format data and, therefore, it is important that the ordered set array contains record numbers of records selected from the array of records.
- 15. The Examiner erroneously contends that the Kosho Document and the Furusho Patent teach step (d) of claims 1, 3, 9, 11 and 29-34, namely, "creating a second value list storing value elements contained in the item value number array and a second pointer array storing position elements indicating elements in the second value list corresponding to the record numbers by referring to the item value number array" as recited by claims 1, 3, 9, 11 and 29-34 (Office Action, dated September 15, 2010, at 5, line 20, to 6, line 2). The Kosho Document, for example, discloses in ¶¶ [0008] and [0009] "sub tabular format data," which pertains to one of two table-format data that are to be joined. The term "sub tabular format data" in the Kosho Document does not mean a part or portion of the main table-format data. Therefore, neither the Kosho Document nor the Furusho Patent teaches, or suggests,

"creating a second value list storing value elements contained in the item value number array and a second pointer array storing position elements indicating elements in the second value list corresponding to the record numbers by referring to the item value number array" as recited by claims 1, 3, 9, 11 and 29-34 of the above-captioned application.

- 16. For all of the above reasons, I conclude that neither the Kosho Document nor the Furusho Patent, either alone or in combination, teach or suggest, steps (b), (c) and (d) recited by claims 1, 3, 9, 11 and 29-34 of the above-captioned application.
- 17. I declare under penalty of perjury that the foregoing is true and correct, that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements so made are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Signed by,

Date:

March, 5, 2010

_ Shinji FURUSHO

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